

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of cleaning at least one surface of an optical device disposed in a vacuum chamber, which device is at least partially contaminated by contaminants introduced by a radiation source, the method comprising the act acts of:

adjusting at least one of a temperature prevailing on the at least one surface and a pressure in the vacuum chamber such that the contaminants hitting the at least one surface are removed from a desired-first portion of said at least one surface; and

collecting the contaminants at at least one obstacle located at a second portion of said at least one surface, wherein said at least one obstacle includes at least one recess formed in said at least one surface.

2. (Previously Presented) The method as claimed in claim 1, wherein the temperature of the at least one surface is set in a range from around 200°C to around 600°C.

3. (Previously Presented) The method as claimed in claim 1, further comprising the act of at least one of heating and cooling the at least one surface of the optical device.

Claim 4 (Canceled)

5. (Currently Amended) The method as claimed in ~~claim 4~~ claim 1, wherein the obstacle ~~is further includes~~ at least one of an elevation and a recess.

6. (Previously Presented) The method as claimed in claim 5, wherein a shape of the elevation has at least one of a strip-like, a cylindrical and a peg-like shape.

7. (Previously Presented) The method as claimed in claim 5,

wherein the elevation is arranged so as to run approximately or fully parallel with rays emitted from the radiation source along the at least one surface.

8. (Previously Presented) The method as claimed in claim 5, wherein the elevation includes at least one of copper, nickel and further material configured to promote formation of accumulations of the contaminants.

9. (Previously Presented) The method as claimed in claim 5, wherein the elevation is applied to the at least one surface of the optical device by a CVD process.

10. (Currently Amended) The method as claimed in ~~claim 5~~ claim 1, wherein the recess includes at least one of a slot, a groove and a hole.

11. (Currently Amended) The method as claimed in ~~claim 5~~ claim 1, wherein the recess is produced by at least one of a photochemical process and a laser treatment.

12. (Previously Presented) The method as claimed in claim 5, wherein a distance in a range from a few  $\mu\text{m}$  to roughly one millimeter exists between the elevation and the recess.

13. (Previously Presented) The method as claimed in claim 1, wherein the contaminants are removed from the at least one surface of the optical device by a chemical process.

14. (Previously Presented) The method as claimed in claim 1, wherein the at least one surface is provided with a coating.

15. (Previously Presented) The method as claimed in claim 14, wherein the coating is executed with a layer thickness of up to approximately 0.5 nm.

16. (Currently Amended) An appliance for cleaning at least one surface of an optical device disposed in a vacuum chamber, which device is at least partially contaminated by contaminants introduced by a radiation ~~source~~ (source, the appliance comprising

at least one control device configured to adjust at least one a temperature prevailing on the at least one surface and a pressure in the vacuum chamber such that the contaminants hitting the at least one surface are removed from a ~~desired~~first portion of said at least one surface, wherein a second portion of said at least one surface includes at least one obstacle for collecting the contaminants, said at least one obstacle including at least one recess formed in said at least one surface.

17. (Previously Presented) The appliance as claimed in claim 16, wherein the temperature of the at least one surface is adjustable over a range from around 200°C to around 600°C.

18. (Previously Presented) The appliance as claimed in claim 16, wherein the at least one control device is further configured to at least one heat and cool the at least one surface of the optical device.

Claim 19 (Canceled)

20. (Currently Amended) The appliance as claimed in ~~claim 19~~  
claim 16, wherein the at least one obstacle further includes at  
least one of ~~an elevation and a recess~~.

21. (Previously Presented) The appliance as claimed in claim  
20, wherein the elevation has at least one of a strip-like, a  
cylindrical and a peg-like shape.

22. (Previously Presented) The appliance as claimed in claim  
20, wherein the elevation is arranged so as to run approximately or  
fully parallel with rays emitted from the radiation source along  
the at least one surface.

23. (Previously Presented) The appliance as claimed in claim  
20, wherein the elevation includes at least one of copper, nickel  
and further material configured to promote formation of  
accumulations.

24. (Previously Presented) The appliance as claimed in claim  
20, wherein the elevation is applied to the at least one surface of

the optical device by a CVD process.

25. (Currently Amended) The appliance as claimed in ~~claim 20~~  
claim 16, wherein the recess includes at least one of a slot, a  
groove and a hole.

26. (Currently Amended) The appliance as claimed in ~~claim 20~~  
claim 16, wherein the recess is produced by at least one of a  
photochemical process and a laser treatment.

27. (Previously Presented) The appliance as claimed in claim  
20, wherein a distance in a range from a few  $\mu\text{m}$  to roughly one  
millimeter exists between the elevation and the recess.

28. (Previously Presented) The appliance as claimed in claim  
16, wherein the contaminants are removed from the at least one  
surface of the optical device by a chemical process.

29. (Previously Presented) The appliance as claimed in claim  
16, wherein the at least one surface is provided with a coating.

30. (Previously Presented) The appliance as claimed in claim 29, wherein the coating is up to approximately 0.5 nm thick.

31. (Currently Amended) A device for keeping a surface clean from contaminants disposed in a chamber comprising:

at least one obstacle ~~formed on~~ including a recess in the surface the surface; and

a controller ~~configure~~ configured to adjust at least one of a temperature of the surface and a pressure in the chamber such that the contaminants are moved toward the at least one obstacle.

32. (Currently Amended) The device of claim 31, wherein the at least one obstacle further includes ~~at least one of an elevation and a recess of~~ formed on the surface.